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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,951	03/07/2005	Janne Muhonen	59643.00579	8417

32294 7590 08/15/2006	EXAMINER
SQUIRE, SANDERS & DEMPSEY L.L.P.	BROOKS, SHANNON

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ART UNIT	PAPER NUMBER
2631	

DATE MAILED: 08/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		10/522,951	MUHONEN, JANNE
		Examiner	Art Unit	
		Shannon R. Brooks	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2005*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *29-56* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *29-56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 February 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date ~~7/21/2005~~ 2/2/05

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

Priority

1.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers

have been placed of record in the file.

2. The information disclosure statement (IDS) submitted on February 2, 2005 is in compliance

with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being

considered by the examiner.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 29-32, 34-45, 47-53, and 55-59 are rejected under U.S.C. 102(b) as being anticipated by

Hanson (US 6023624).

Consider **Claim 29**, Hanson clearly teaches and discloses a method of providing location

information in a mobile communication system, comprising the steps of: receiving a request for a

current location of a mobile station **(Col. 1, lines 42-48)** ; determining a time at which a last

known location of the mobile station was determined **(Col. 1, line 64-67)**; comparing the time to

a threshold time limit **(Col. 4, lines 1-5)**, and, in response to the said step of comparing,

providing, as the current location, the last known location if the time is within the threshold time

limit **(Col. 4, lines 7-12)**.

Consider **Claim 30** Hanson clearly teaches and discloses a method according to claim 29 further

comprising the steps of: determining a current location of the mobile station if the time is not

within the threshold limit **(read as flood paging)(Col. 4, line 5 and Fig. 5, Block 521)**; and

providing, as the current location, the obtained current location **(Col. 2, lines 7-19)**.

Consider **Claim 31**, Hanson clearly teaches and discloses a method according to claim 29

wherein the step of comparing the time to the threshold time limit is dependent upon the status

(read as registered)(Col. 4, line 2) of the mobile station.

Consider **Claim 32**, Hanson clearly teaches and discloses a method according to claim 31

wherein if the mobile station is active the comparing step is disabled **(read as initial restricted**

paging is enabled)(Col. 5, line 36) and a current location is determined for the mobile station

(read as 3 or even more most recent locations)(Col. 5, lines 34-35).

Consider **Claim 34**, Hanson clearly teaches and discloses a method according to claim 30,

wherein if a current location is not provided, the last known location is provided as the current

location **(read as last registration)(Col. 1, line 62).**

Consider **Claim 35**, Hanson clearly teaches and discloses a method according to claim 29 further

comprising the step of storing the last known location of a mobile station together with a time

associated with the last known location **(Fig. 1, Data Table).**

Consider **Claim 36**, Hanson clearly teaches and discloses a method according to claim 29 further

comprising the step of storing the threshold time limit **(read as elapsed time)(Col.1, line 65).**

Consider **Claim 38**, Hanson clearly teaches and discloses a method according to claim 29

wherein the threshold time limit is set by a network operator **(Col. 5, lines 29-31).**

Consider **Claim 39**, Hanson clearly teaches and discloses a method according to claim 29

wherein the threshold limit is included in the request for the current location **(Col. 4, lines 1-12).**

Consider **Claim 40**, Hanson clearly teaches and discloses a method according to claim 29

wherein the time is an elapsed time **(Col. 1, line 65).**

Consider **Claim 41**, Hanson clearly teaches and discloses a method of providing location

information in a mobile communication system, comprising the steps of: receiving at a network

element a request from an application for a current location of a mobile station **(Col. 3, lines 63-64)**, determining, at the network element, a time at which a last known location of the mobile station was determined **(Col. 3, line 63-67 and Col. 4, line 1)**; comparing, at the network element, the time to a threshold time limit **(Col. 4, lines 1-5)**; and, in response to the said step of comparing, providing to the application, as the current location, the last known location if the time is within the threshold time limit **(Col. 4, lines 7-12)**.

Consider **Claim 42,** Hanson clearly teaches and discloses a network element for providing location information in a mobile communication system, comprising: means for receiving a request for a current location of a mobile station **(Col. 3, line 63-64)**, means for determining a time at which a last known location of the mobile station was determined **(Col. 4, lines 1-5)**; means for comparing the time to a threshold time limit **(Fig. 5, Blocks 531, 533, 535, and 505)**; and means for providing, as the current location, in response to the said step of comparing, the last known location if the time is within the threshold time limit **(Fig. 5, Block 507)**.

Consider **Claim 43**, Hanson clearly teaches and discloses a network element according to claim 42 further comprising means for determining a current location for the mobile station if the time is not within the threshold limit **(Fig. 5, Blocks 513, 517, and 521)**; wherein the means for providing is adapted to provide, as the current location, the obtained current location **(Fig. 5, Blocks 513, 517, and 521)**.

Consider **Claim 44**, Hanson clearly teaches and discloses a network element according to claim

42 wherein the means for comparing the time to the threshold time limit is responsive to a signal

(read as registration)(Col. 2, line 1) indicating the status of the mobile station.

Consider **Claim 45**, Hanson clearly teaches and discloses a network element according to claim

44 responsive to said signal indicating that the mobile station is active the comparing means is

disabled **(read as initial restricted paging)(Col. 5, line 36)** and a current location is determined

for the mobile station **(read as three or more recent locations)(Col. 5, line 36).**

Consider **Claim 47**, Hanson clearly teaches and discloses a network element according to claim

43, wherein if a current location is not provided, the network element is adapted to provide the

last known location is provided as the current location **(read as last registration or**

location)(Col. 1, line 62).

Consider **Claim 48**, Hanson clearly teaches and discloses a network element according to claim

42 further comprising means for storing the last known location of a mobile station together with

a time associated with the last known location **(Fig. 1, Data Table).**

Consider **Claim 49**, Hanson clearly teaches and discloses a network element according to claim

42 further comprising means for storing the threshold time limit **(Col. 3, lines 7-21).**

Consider **Claim 50**, Hanson clearly teaches and discloses a network element according to claim

42 further comprising means for dynamically adjusting the threshold time limit **(Col. 5, lines 29-**

31).

Consider **Claim 51**, Hanson clearly teaches and discloses a network element according to claim

42 wherein the threshold time limit is set by a network operator **(Col. 5, lines 29-31).**

Consider **Claim 52**, Hanson clearly teaches and discloses a network element according to claim

42 wherein the threshold time limit is included in the request for a current location **(Fig. 5,**

Blocks 531, 533, 535, and 505).

Consider **Claim 53**, Hanson clearly teaches and discloses a mobile communication system

including an application for providing location dependent services and for generating a location

request for a user equipment **(Figs. 1 and 3-5)**; a network element for receiving the request for a

current location of a mobile station **(Col. 3, lines 63-64)**, a network element for determining a

time at which a last known location of the mobile station was determined and for comparing the

time to a threshold time limit **(Fig. 1, Data Table)**; and a network element **(read as call**

processor)(Fig. 1, Block 30) for providing, as the current location, in response to the said step of

comparing, the last known location if the time is within the threshold time limit.

Consider **Claim 55**, Hanson clearly teaches and discloses a mobile communication system

according to claim 53 wherein the system implements a CAMEL framework **(Figs. 1 and 3-5).**

Consider **Claim 56**, Hanson clearly teaches and discloses a mobile communication system

according to claim 53 wherein the system implements location services **(Col. 1, lines 56-67 and**

Col. 2, lines 1-18).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966),

that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 33, 46, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muhonen

in view of Kallin (US 6058308).

Consider Claim 33, Muhonen teaches a method wherein the mobile has a status except that it

does not specifically teach wherein if the status of the mobile station is **idle**, the comparing step

is enabled.

However, Kallin clearly teaches wherein if the status of the mobile station is idle **(Col. 2, lines**

27-31) the comparing step is enabled.

Therefore it would have been obvious to one of ordinary skill in the art to incorporate the

teachings of Kallin into Mulhonen to provide the network with an indication of the position at

which the mobile is located.

Consider Claim 46, Muhonen teaches a network element wherein responsive to said signal

except that it does not specifically teach a network element wherein responsive to said signal

indicating that the mobile station is **idle**, the comparing means is enabled.

However, Kallin clearly teaches a network element wherein responsive to said signal indicating

that the mobile station is **idle (Col. 2, lines 27-31)** the comparing step is enabled.

Therefore it would have been obvious to one of ordinary skill in the art to incorporate the

teachings of Kallin into Mulhonen to provide the network with an idle indication to allow

registration of the mobile.

Consider Claim 54, Muhonen teaches a mobile communication system, wherein the network

element for determining the time at which the last known location was determined except that it

does not teach wherein the network element for determining the time at which the last known

location was determined includes a **visitor location register.**

However Kallin teaches a mobile communication system, wherein the network element for

determining the time at which the last known location was determined includes a **visitor location**

register Col.2, lines 60-63).

Therefore it would have been obvious to one of ordinary skill in the art to incorporate the

teachings of Kallin into Mulhonen to provide a network element to receive a registration report

of the mobile.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Lee (US 6181945 B1) disclose a Method and Device for Accessing A

Telecommunications Network and for Billing Telecommunications Services.

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to:**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Shannon Brooks whose telephone number is (571) 270-1115.

The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Rafael Perez-Gutierrez can be reached on (571) 272-7915. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EDAN ORGAD
PATENT EXAMINER/TELECOMM.